



# ON SCENE COORDINATOR'S REPORT

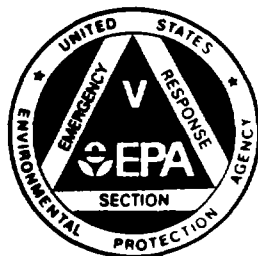
ON-SCENE COORDINATORS REPORT

CERCLA REMOVAL PROJECT

REVERE COPPER AND BRASS CORPORATION

DETROIT, MICHIGAN

**Region V**  
**Waste Management Division**  
**Emergency Response Section**



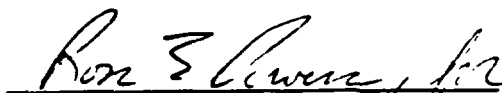
EPA Region 5 Records Ctr.



239542

ON-SCENE COORDINATORS REPORT  
CERCLA REMOVAL PROJECT  
REVERE COPPER AND BRASS CORPORATION  
DETROIT, MICHIGAN

SITE I.D. # AL  
DELIVERY ORDER NO. 7460-05-108  
REMOVAL DATES: 03/18/88 - 04/27/88



Peter D. Neithercut  
On-Scene Coordinator  
Emergency and Enforcement Branch  
Waste Management Division  
Region V  
United States Environmental Protection Agency

EXECUTIVE SUMMARY

The Emergency Response Branch of the U.S. Environmental Protection Agency (U.S. EPA), Region V, initiated a removal action at the Revere Copper and Brass site in Detroit, Michigan, on March 18, 1988. The emergency cleanup resulted from the illegal dumping of 11 drums and 2 transformers containing polychlorinated biphenyl (PCB) contaminated oil. The drummed materials as well as the PCB oil posed a direct contact threat since access to the site was not restricted and the area was often used by local sport fisherman. The site is adjacent to the Detroit River and the additional threat of the hazardous substances migrating to and contaminating the waterway existed.

The removal action involved the disposal and/or incineration of all the drums, PCB oil, transformers, and contaminated soil. An additional 45 capacitors containing PCB oil, which were discovered in the Revere Copper and Brass building during a site assessment on September 17, 1987, were also removed and sent for incineration as part of the emergency removal action.

The action was completed on April 27, 1988, at a cost of \$72,928.22 of which \$58,766.53 was the Emergency Response Cleanup Services contractor cost.

The On-Scene Coordinator (OSC) was Peter D. Neithercut of the U.S. EPA, Region V.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY.....	i
List of Figures.....	ii
List of Tables.....	ii
List of Appendices.....	iii
 1.0 SUMMARY OF EVENTS.....	 1
1.1 Location.....	1
1.2 Site History.....	1
1.3 Local and State Efforts to Clean Up Site.....	1
1.4 Initial Situation.....	1
1.5 Threat.....	4
1.6 Attempt to Obtain a Responsible Party Cleanup.....	 5
1.7 Federal Cleanup Actions.....	5
1.8 Community Relations.....	6
1.9 Cost Summary.....	6
 2.0 EFFECTIVENESS OF THE REMOVAL ACTIONS	
2.1 Responsible Party(ies).....	6
2.2 Local and State Agencies.....	6
2.3 Federal Agencies.....	6
 3.0 PROBLEMS ENCOUNTERED.....	 7
 4.0 RECOMMENDATIONS.....	 7

LIST OF FIGURES

	Page
Figure 1 - Location Map .....	2
Figure 2 - Site Map .....	3

LIST OF TABLES

Table 1 - Analytical Results of TAT Samples.....	8
Table 2 - Hazardous Waste Manifested Off-Site .....	8
Table 3 - Summary of Daily Emergency Response Cleanup Services.....	9
Table 4 - Summary of Emergency Response Cleanup Services Contractor Expenditures by Service Category.....	10
Table 5 - Summary of Removal Expenditures.....	11

LIST OF APPENDICES

- A. Action Memorandum
- B. ERCS Delivery Order
- C. TAT TDD
- D. Correspondence and Conversation Records
- E. SA/RAP
- F. Polreps
- G. Site Log
- H. CERCLA Documentation
  - H.1. Work Orders
  - H.2. Work Reports
  - H.3. Site Entry/Exit Logs
  - H.4. Authorized Invoices
- I. 1900-55 Forms
- J. Incident Obligation forms
- K. TAT Cost documentation
- L. Photo Log
- M. Sample information
  - M.1. Laboratory Chain-of-Custody forms
- N. Truck Manifests

NOTE: Portions of these appendices may contain confidential business information and should be reviewed by the Office of Regional Counsel prior to release to the public.

## 1.0 SUMMARY OF EVENTS

### 1.1 Location

The Revere Copper and Brass (RCB) Corporation site is located at 5851 W. Jefferson Avenue, approximately 1-1/4 miles southwest of the Ambassador Bridge in Wayne County, Michigan (Figure 1). The site is located in an urban residential and industrial area adjacent to the Detroit River. The RCB site is bordered on the north by West Jefferson Avenue, on the east by Misterski Public Lighting Facility, on the south by the Detroit River, and on the west by Historic Fort Wayne (Figure 2).

### 1.2 Site History

Revere Copper and Brass purchased the property and associated buildings in the 1920's. The major operation at the RCB facility was the melting of scrap copper into "cakes" which were then fabricated into copper bearing products. The facility was closed and all equipment removed in 1985. Ownership of the property was subsequently transferred to the City of Detroit's Community Economic Development Department (CEDD). Due to the processes of refabrication and handling of scrap copper which occurred at the RCB facility, the building was suspected of being contaminated with polychlorinated biphenyls (PCBs).

After the city assumed ownership of the property, scrap metal dealers removed support beams and other miscellaneous metal without authorization. Illegal dumping of tires, solid waste, and roofing shingles occurred during the scrapping activities.

### 1.3 Local and State Efforts to Clean Up Site

After the Revere Copper and Brass Corporation closed the facility and removed all equipment in 1985, the City of Detroit CEDD assumed ownership. Since that time, the site has become a dump yard for tires, automobiles, and other solid debris. The City of Detroit CEDD has made no effort to restrict access to the property by posting or fencing the site.

According to information gathered by the Technical Assistance Team (TAT), the Michigan Department of Natural Resources (MDNR) or other state agencies have not been involved at the site in the past.

### 1.4 Initial Situation

On September 12, 1987, the TAT, as tasked by the U.S. Environmental Protection Agency (U.S. EPA), performed a site inspection at the RCB facility. The TAT noted several areas of suspected asbestos pipe wrapping, a myriad of equipment mounting pits containing water and oil, and two banks of capacitors mounted in pits beneath the ground level. The TAT also noted one punctured capacitor lying on the floor above the pit. On November



FIGURE 1  
SITE LOCATION MAP  
REVERE COPPER AND BRASS  
DETROIT, MICHIGAN

NO SCALE





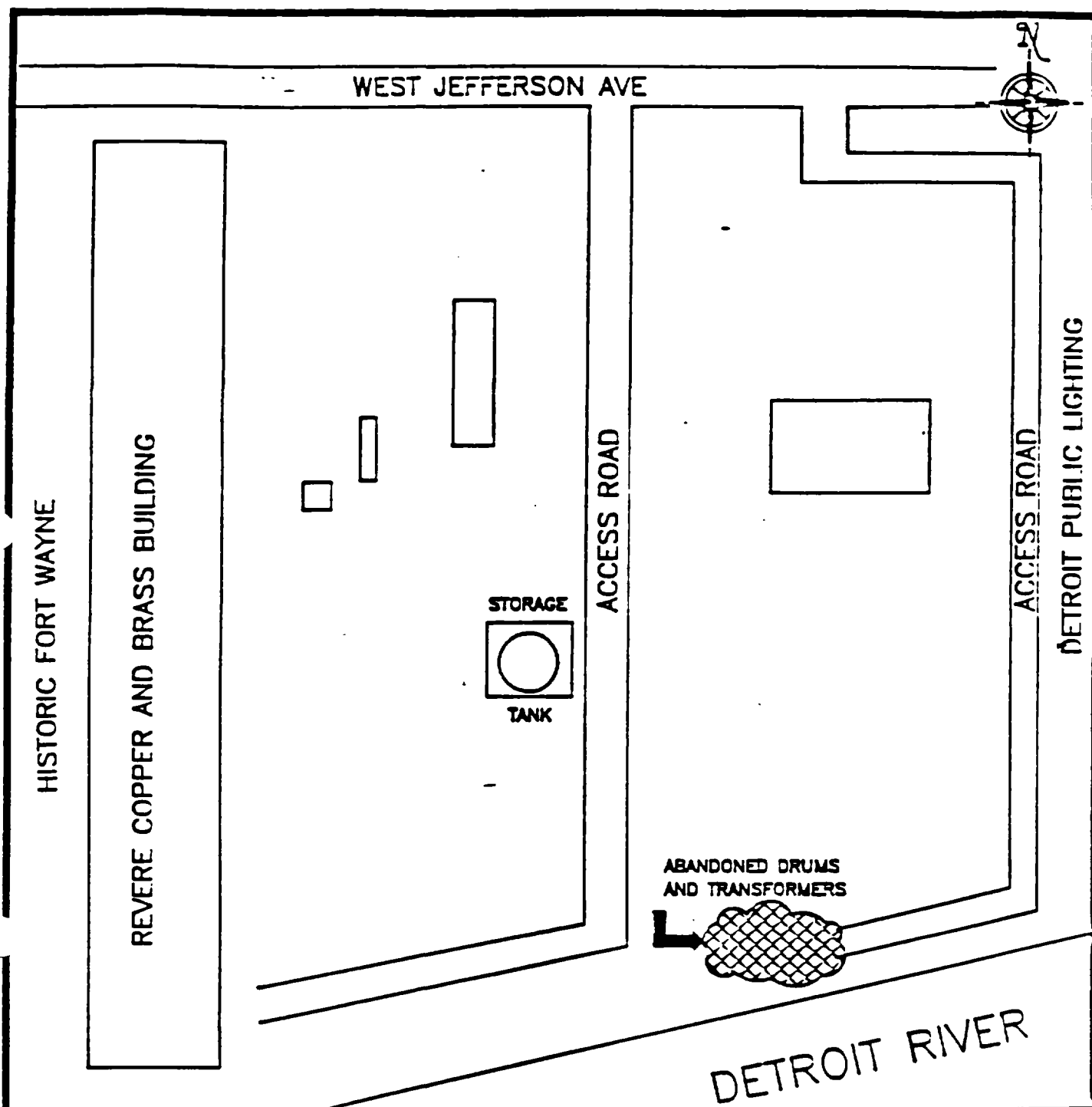


FIGURE 2  
SITE MAP  
REVERE COPPER AND BRASS  
DETROIT, MICHIGAN

NOT TO SCALE



5, 1987, the TAT revisited the site and collected six liquid samples from various equipment mounting pits, and one sample of soil beneath the punctured capacitor. All samples were analyzed for PCB contamination. The liquid samples all contained PCB concentrations of less than 6.0 parts per million (ppm). The sample of the soil beneath the punctured capacitor contained a PCB concentration of 160,000 ppm (Table 1). The TAT subsequently submitted a Removal Action Plan (TDD #5-89709-08) recommending the removal of the PCB contaminated capacitors and surrounding soil and debris.

On March 16, 1988, the U.S. EPA was notified that eleven drums and two transformers had been illegally dumped adjacent to the Detroit River at the PCB site (Figure 2). The TAT was tasked to respond to the site to document the items dumped and to sample standing pools of oily liquid surrounding the transformers (TDD #5-8803-12). Subsequent analysis of two samples from the standing pools revealed PCB concentrations of 141,000 and 188,000 ppm (Table 1).

### 1.5 Threat

The percentage levels of PCBs, coupled with the site's proximity to the Detroit River and areas readily accessible to local sport fisherman presented an immediate risk to human health and the environment as outlined in Section 300.65 (b) (2) of the National Contingency Plan (NCP). The threats posed by the site included the following:

- 1) The presence of percent levels of PCB in soil and standing pools of oil in an unrestricted area commonly used by local fisherman posed a threat via direct contact.
- 2) The presence of drums containing hazardous substances posed a threat via direct contact and inhalation, as access to the area was unrestricted and often used by local fisherman.
- 3) Weather conditions threatened to cause migration of the PCBs and the hazardous substances contained in the drums to the nearby Detroit River, additionally exposing the food chain.

PCBs are known to exhibit a high degree of environmental persistence and a tendency to bioaccumulate. Chronic effects found in laboratory animal studies include liver damage, various adverse dermal effects, various reproductive dysfunctions, and suppression of the immune systems. Adverse human health effects from PCB exposure appears to be the exhibition of certain dermal disorders such as chloracne and systematic symptoms such as nausea, headaches, digestive disturbances, liver damage and neural effects.

PCBs may enter the body through dermal exposure as well as ingestion and inhalation. The U.S. EPA action level for PCBs is

25 ppm for areas less than 0.1 KM from residential or commercial areas as stated in 40 CFR Section 761.125.

#### 1.6 Attempt To Obtain a Responsible Party

On March 16, 1988, the U.S. EPA notified the City of Detroit CEDD that the Revere Copper site posed an immediate threat to human health and the environment based on the results of the TAT samples of the oily pools taken on March 16, 1988. After more formal notification on March 17, 1988, including an opportunity to implement the cleanup, the City of Detroit CEDD declined to initiate an immediate cleanup action.

#### 1.7 Federal Cleanup Actions

On March 18, 1988, due to the City of Detroit's CEDD decision not to respond to the situation, U.S. EPA On-Scene Coordinator (OSC) Peter Neithercut mobilized Emergency Response Cleanup Services (ERCS) contractor Inland Waters Pollution Control to perform a removal action. In addition, Sentry security began providing site security during non-working hours.

On the first day of site cleanup activities the TAT implemented a site safety plan and sampled drums numbers 1 through 9 in addition to documenting site activities. Standing PCB contaminated liquid was pumped into two drums and placed in overpacks. Debris was cleared for the placement of rolloff boxes. Contaminated soil in the area of the dumped drums and transformers was excavated and dumped into 20 yard rolloff boxes.

On March 22, 1988, the TAT sampled the most contaminated rolloff box, the pumped PCB liquids, decontamination water, and drum #3. In addition, the cleanup contractor decontaminated the cement pad below the excavated soil and moved site debris to establish a new staging area. They then restaged all drums and rolloff boxes at the new staging area with the exception of one overpack of capacitors which had been dumped into an equipment pit by vandals. The ERCS contractor also consolidated drums #7, 10, and 11 into drum #3.

The disposal phase of the PCB cleanup began on April 22, 1988, and is summarized in Table 2. The disposal proceeded as follows:

- 1) One rolloff box was sent to the Chemical Waste Management facility in Emelle, Alabama on April 22, 1988.
- 2) The two transformer carcasses were rinsed with kerosene, removed from the rolloff box, and sealed with Visqueen on April 26, 1988.
- 3) On April 27, 1988 the three remaining rolloff boxes were pumped free of liquids and sent to the Chemical Waste Management Facility in Emelle, Alabama. One non-PCB drum of oil was sent to Petrochem in Detroit, Michigan for disposal.

- 4) The following items were sent to APTUS in Coffeyville, Kansas on April 27, 1988:
  - a) Two transformer carcasses;
  - b) Four overpacks of capacitors; forty-five capacitors in total.
  - c) Seven drums of pumped PCB liquids (two from original spill, five from rolloff boxes).
  - d) Eight overpacked drums of PCB contaminated oils.

#### 1.8 Community Relations

City officials from the Detroit Health Department visited the site on several occasions throughout the duration of the cleanup to keep appraised on the progress of the removal activities. Site security was provided throughout the duration of the cleanup to restrict access to the area by local fisherman.

#### 1.9 Cost Summary

The prime ERCS contractor, PEI Associates, and the subcontractor, Inland Water Pollution Control, completed the removal action under ERCS contract #68-01-7460, and Delivery Order #7460-05-108. Site activity was initiated on March 15, 1988, and was completed on April 27, 1988. A summary of the total ERCS contractor expenditures is presented in Table 4 and totaled \$58,766.53. In addition to the costs incurred by the ERCS contractors, recoverable costs were also expended by the TAT and the U.S. EPA Emergency Response Section. Combined contractor, TAT, and U.S. EPA costs incurred are presented in Table 5.

#### 2.0 EFFECTIVENESS OF THE REMOVAL ACTION

##### 2.1 Responsible Parties

As stated in section 1.6, the owner of the site, City of Detroit CEDD, was notified of the immediate threat that existed at the site but declined to initiate or take part in the removal action.

##### 2.2 Local and State Agencies

As stated in section 1.8, officials from the City of Detroit Health Department monitored site cleanup activities by visiting the site throughout the duration of the removal activities. There were no local or state agencies actively involved in the removal action.

##### 2.3 Federal Agencies

The U.S. EPA was the only federal agency involved in the removal

action. The U.S. EPA promptly responded to the report of abandoned drums and transformers by immediately sampling the suspected PCB oil, and, upon verification of sampling results, initiating a removal action within 48 hours of notification of the incident. Actions taken by the U.S. EPA effectively mitigated the immediate threats posed by the site. As part of this removal action, the U.S. EPA also removed and disposed of the capacitors found inside the Revere building during a previous site assessment resulting in a cost savings to the U.S. EPA.

### 3.0 PROBLEMS ENCOUNTERED

There were various minor problems with the ERCS contractor, Inland Water Pollution Control, in that, on two occasions, unauthorized equipment was ordered and used (Appendix G, Site Log). These problems did not have a major impact on the effectiveness of the removal action.

During the week-end of March 19 and 20, 1988, vandals had overturned the overpack drums, causing the contents of the two drums to be released.

On the night of March 21, 1988, vandals threw one overpack drum containing capacitors into an equipment pit inside the Revere Copper and Brass building.

### 4.0 RECOMMENDATIONS

OSC has no specific recommendation for further action at this time.

TABLE 1

ANALYTICAL RESULTS OF TAT SAMPLES  
REVERE COPPER AND BRASS SITE  
DETROIT, MICHIGAN

STATION	DATE TAKEN	PARAMETER	CONCENTRATION*
SOIL UNDER CAPACITOR	11-5-87	PCB	160,000
POOLED OIL NEAR TRANSFORMERS	3-16-88	PCB	188,000
POOLED OIL NEAR TRANSFORMERS	3-16-88	PCB	141,000

\*All concentrations reported in parts per million (ppm)

TABLE 2

HAZARDOUS WASTE MANIFESTED OFF-SITE  
REVERE COPPER AND BRASS SITE  
DETROIT, MICHIGAN

WASTE CATEGORY	QUANTITY	DATES REMOVED	DISPOSAL SITE
CONTAMINATED SOIL	4 20 YARD ROLL-OFF BOXES	4-22-88 4-27-88	CHEMICAL WASTE MANAGEMENT EMELLE, ALABAMA
TRANSFORMER CARCASSES	2	4-27-88	APTUS COFFEYVILLE, KANSAS
CAPACITORS	45	4-27-88	APTUS COFFEYVILLE, KANSAS
CONTAMINATED LIQUIDS	7 55 GALLON DRUMS	4-27-88	APTUS COFFEYVILLE, KANSAS
WASTE OIL	1 OVERPACKED DRUM	4-27-88	PETROCHEM DETROIT, MICHIGAN

TABLE 3

SUMMARY OF DAILY ERCS  
CONTRACTOR EXPENDITURES\*  
Revere Copper and Brass  
Detroit, Michigan

<u>DATE</u>	<u>AMOUNT</u>
03-15-83	\$259.67
03-16-83	654.80
03-17-83	738.33
03-18-83	4039.79
03-19-83	10.81
03-20-83	10.81
03-21-83	3003.90
03-22-83	2175.50
03-23-83	140.33
03-24-83	114.03
03-25-83	109.25
03-26-83	214.88
03-27-83	\$22.72
03-28-83	\$51.33
03-29-83	\$42.16
03-30-83	\$51.88
04-01-83	51.33
04-02-83	51.33
04-03-83	249.92
04-04-83	2470.32
04-05-83	42.16
04-06-83	16.24
04-07-83	12.97
04-08-83	1.09
04-09-83	145.70
04-10-83	390.20
04-11-83	38.91
04-12-83	38.91
04-13-83	51.33
04-14-83	51.33
04-15-83	612.45
04-16-83	2645.63
04-17-83	1155.46
04-18-83	1740.30
05-23-83	29523.07
07-15-88	7957.97
<b>TOTAL</b>	<b>\$58,953.45</b>

\*Based on 1900-88s.

TABLE 4

SUMMARY OF EMERGENCY RESPONSE CLEANUP SERVICES CONTRACTOR  
EXPENDITURES BY SERVICE CATEGORY

Revere Copper and Brass, Detroit, Michigan

<u>SERVICE</u>	<u>AMOUNT*</u>
Labor	\$ 8,492.97
Travel and Subsistence	0.00
Equipment	5,066.57
Materials	2,072.49
Transportation	14,652.30
Disposal	19,253.99
Analytical	1,097.52
Other Sub-contract costs	8,656.55
Adjustments	<u>186.92</u>
TOTAL	\$58,766.53

\* Based on Invoice #2



TABLE 5

## SUMMARY OF REMOVAL EXPENDITURES

Revere Copper and Brass, Detroit, Michigan

<u>ORGANIZATION</u>	<u>AMOUNT</u>
ERCS Contractor	\$58,766.53
U.S. EPA	7,364.04
Emergency Response Section (ERS)	
Regional Administrator's Office	
Office of Public Affairs	
Subsistence and Travel (ERS)	
Technical Assistance Team	<u>6,797.65</u>
TOTAL PROJECT COST	\$72,928.22

Any indication of specific costs incurred in this OSC report is only an approximation and is subject to internal audit and final definitization. The OSC report is not a final reconciliation of the costs associated with a particular site.